#### APPENDIX C

Parts 1, 21 and 74 of Title 47 of the Code of Federal Regulations are proposed to be amended as follows:

#### PART 1 - PRACTICE AND PROCEDURE

1. Section 1.1307 would be amended by adding the following language directly following the reference to MDS stations:

MDS licensees are required to attach a label to subscriber transceiver or transverter antennas that (1) provides adequate notice regarding potential radio frequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and (2) references the applicable FCC-adopted limits for radio frequency exposure specified in §1.1310 of this chapter.

1a. Section 1.1307 likewise would be amended by adding the following language directly following the reference to Part 74, Subpart I stations:

ITFS licensees are required to attach a label to subscriber transceiver or transverter antennas that (1) provides adequate notice regarding potential radio frequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and (2) references the applicable FCC-adopted limits for radio frequency exposure specified in §1.1310 of this chapter.

#### PART 21 - DOMESTIC PUBLIC FIXED RADIO SERVICES

2. The authority citation for Part 21 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334.

3. Section 21.2 would be amended by revising the definitions of "Multipoint distribution service," "Multipoint distribution service response station" and "Signal Booster Station" and by adding a definition for "Response Station Hub" to read as follows:

### §21.2 Definitions.

Multipoint Distribution Service (MDS). A domestic public radio service rendered on microwave frequencies from one or more a fixed stations transmitting to multiple receiving facilities located at fixed points and/or from multiple Multipoint Distribution Service response stations transmitting to response station hubs.

Multipoint Distribution Service response station. A fixed station operated by an MDS licensee, the lessee of MDS channel capacity or a subscriber of either to communicate with a response

station hub or associated MDS station. A response station under this part may share facilities with other MDS response stations and/or one or more Instructional Television Fixed Service (ITFS) response stations authorized pursuant to §74.939.

\* \* \* \* \*

Response Station Hub. A fixed facility licensed for use in accordance with §21.909 that is operated by an MDS licensee or the lessee of an MDS facility for the reception of information transmitted by one or more MDS response stations. A response station hub licensed under this part may share facilities with other MDS response station hubs and/or ITFS response station hubs authorized pursuant to §74.939.

\* \* \* \* \*

Signal Booster Station. An MDS station licensed for use in accordance with §21.913 that operates on one or more MDS channels. Signal booster stations are intended to augment service as part of a distributed transmission system where signal booster stations retransmit the signals of one or more MDS stations and/or originate transmissions on MDS channels. A signal booster station licensed under this part may share facilities with other MDS signal booster stations and/or one or more ITFS signal booster stations authorized pursuant to §74.985.

\* \* \* \* \*

4. Section 21.27 would be revised by adding a new subsection (d) to read as follows:

§21.27 Public notice period.

\* \* \* \* \*

(d) Effective as of [date of adoption of new rules], there shall be one one-week window at such time as the Commission shall announce by public notice for the filing of applications for booster stations and response station hub authorizations, during which all applications shall be deemed to have been filed as of the same day for purposes of §§21.909 and 21.913. Following the publication of a public notice announcing the tendering for filing of applications submitted during that window, applicants shall have a period of sixty (60) days to amend their applications, provided such amendments do not result in any increase in interference to any previously proposed or authorized station (including facilities proposed during the window) absent consent of the applicant for or licensee of the station that would receive such interference. At the conclusion of that sixty (60) day period, the Commission shall publish a public notice announcing the acceptance for filing of all applications submitted during the initial window, including those amended during the sixty (60) day period. All petitions to deny applications filed during the one-week window must be filed within sixty (60) days of such second public notice. On the sixty- first (61st) day after the publication of such second public notice, applications for new or

modified response station hub and booster station authorizations may be filed and will be processed in accordance with the provisions of §§ 21.909 and 21.913.

5. In Section 21.30, paragraph (a)(4) would be revised to read as follows:

## §21.30 Opposition to applications.

- (a) \* \* \*
- \* \* \* \* \*
- (4) except as provided in §21.901(d)(1) regarding Instructional Television Fixed Service licensees, in §21.909 regarding MDS response station hubs and in §21.913 regarding MDS booster stations, be filed within thirty (30) days after the date of public notice announcing the acceptance for filing of any such application or major amendment thereto, or identifying the tentative selectee of a random selection proceeding in the Multichannel Multipoint Distribution Service or for Multipoint Distribution Service H-channel stations (unless the Commission otherwise extends the filing deadline); and
- \* \* \* \* \* \* \* \* \*
- 6. In Section 21.42, paragraph (c) would be revised to read as follows:
- §21.42 Certain modifications not requiring prior authorization.
- \* \* \* \* \*
- (c) Modifications that may be made without prior authorization under paragraph (b) of this section are:
- \* \* \* \* \*
- (9) A change to a sectorized antenna system comprising an array of directional antennas, provided that such system does not change polarization or result in an increase in radiated power by more than one dB in any direction.
- 7. In Section 21.101(a), note 2 would be revised to read as follows:

# §21.101 Frequency tolerance.

- (a) \* \* \*
- <sup>2</sup>Beginning November 1, 1991, equipment authorized to be operated in the frequency bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz, and 2674-2680 MHz for

use in the Multipoint Distribution Service shall maintain a frequency tolerance within  $\pm 1$  kHz of the assigned frequency. MDS booster stations authorized pursuant to §21.913(b) shall maintain a frequency tolerance within  $\pm 1$  kHz of the assigned frequencies. MDS booster stations authorized pursuant to §21.913(e) and MDS response stations authorized pursuant to §21.909 shall employ transmitters with sufficient frequency stability to ensure that the emission stays within the authorized frequency block.

\* \* \* \* \*

8. In Section 21.118, paragraph (c) would be revised to read as follows:

## §21.118 Transmitter construction and installation.

. . . . .

(c) Each transmitter employed in these services shall be equipped with an appropriately labeled pilot lamp or meter which will provide continuous visual indication at the transmitter when its control circuits have been placed in a condition to activate the transmitter. Such requirement will not be applicable to MDS response stations or MDS booster stations authorized pursuant to § 21.913(e). In addition, facilities shall be provided at each transmitter to permit the transmitter to be turned on and off independently of any remote control circuits associated therewith.

\* \* \*

9. Section 21.201 would be revised to read as follows:

# §21.201 Posting of station authorization information.

Each licensee shall post at the station, the booster station authorized pursuant to §21.913(b) or the MDS response station hub the name, address and telephone number of the custodian of the station license or other authorization if such license or authorization is not maintained at the station or response station hub. Each authorized operator of an MDS booster station authorized pursuant to §21.913(e) shall post at the booster station the name, address and telephone number of the custodian of the notification filed pursuant to §21.913(e) if such notification is not maintained at the station.

10. In Section 21.901, paragraphs (a), (b) and (d) would be revised, and new paragraph (g) would be added, to read as follows:

## §21.901 Frequencies.

- (a) Frequencies in the bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz, 2674-2680 MHz and 2686-2690 MHz are available for assignment to fixed stations in this service. Frequencies in the band 2150-2160 MHz are shared with nonbroadcast omnidirectional radio systems licensed under other parts of the Commission's Rules, and frequencies in the band 2160-2162 MHz are shared with directional radio systems authorized in other common carrier services. Frequencies in the 2596-2644 MHz band are shared with Instructional Television Fixed Service stations licensed under Part 74 of the Commission's Rules. Channels H4e, H4m, H4f and H4n, listed in §74.939(i) of this chapter, are assigned to fixed stations in the 2596-2620 band, and are shared with Instructional Television Fixed Service Stations licensed under Part 74 of the Commission's Rules to operate in this band; grandfathered channels H4u, H4cc, H4v and H4dd, listed in §74.939(i) of this chapter, are licensed under Part 21 or Part 74 of the Commission's Rules, as applicable.
- (b) Applicants may be assigned a channel(s) according to one of the following frequency plans:
  - (1) At 2150-2156 MHz (designated as Channel 1), or
  - (2) At 2156-2162 MHz (designated as Channel 2), or
  - (3) At 2156-2160 MHz (designated as Channel 2A), or
- (4) At 2596-2602 MHz, 2608-2614 MHz, 2620-2626 MHz, and 2632-2638 MHz (designated as Channels E1, E2, E3 and E4, respectively, with the four channels to be designated the E-group channels), and Channels H4e and H4m listed in §74.939(i), or
- (5) At 2602-2608 MHz, 2614-2620 MHz, 2626-2632 MHz and 2638-2644 MHz (designated as Channels F1, F2, F3 and F4, respectively, with the four channels to be designated the F-group channels), and Channels H4f and H4n, listed in §74.939(i), or
- (6) At 2650-2656 MHz, 2662-2668 MHz and 2674-2680 MHz (designated as Channels H1, H2 and H3, respectively, with the three channels to be designated the H-group channels).
- (d) Frequencies in the band 2596-2644 MHz and associated 125 kHz channels listed in Section 74.939(i) will be assigned only in accordance with the following conditions.

(g) Frequencies in the bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz and 2674-2680 MHz are available for point-to-multipoint use and/or for communications between MDS response stations and response station hubs when authorized in accordance with the provisions of §21.909, provided that such frequencies may be employed for MDS response stations only when transmitting using digital modulation.

#### NOTES:

<sup>1</sup> No 125 kHz channels are provided for Channels E3, E4, F3, F4, H1, H2 and H3, except for those grandfathered for Channels E3, E4, F3 and F4.

11. Section §21.902 would be revised by adding a new paragraph (l) to read as follows:

§21.902 Frequency interference.

- (1) Special rules relating to response station hubs and booster service areas are set forth in §§21.909, 21.913, 74.939 and 74.985. To the extent those specific rules are inconsistent with any rules set forth above, those specific rules shall control.
- 12. In Section 21.903, paragraph (a) would be revised to read as follows:

## §21.903 Purpose and permissible service.

(a) Multipoint Distribution Service channels are available for transmissions from MDS stations and associated MDS signal booster stations to receive locations, and from MDS response stations to response station hubs. When service is provided on a common carrier basis, subscriber supplied information is transmitted to points designated by the subscriber. When service is provided on a non-common carrier basis, transmissions may include information originated by persons other than the licensee, licensee-manipulated information supplied by other persons, or information originated by the licensee. Point-to-point radio return links from a subscriber's location to a MDS operator's facilities may also be authorized in the 18,580 through 18,820 MHz and 18,920 through 19,160 MHz bands. Rules governing such operation are contained in Subpart I of Part 101 of this chapter, the Point-to-Point Microwave Radio Service.

13. In Section 21.904, paragraph (c) would be revised to read as follows:

## §21.904 Transmitter power.

(c) An increase in station transmitter power, above currently-authorized or previously proposed values, to the maximum values provided in paragraphs (a) and (b) of this section, may be authorized, if the requested power increase would not cause harmful interference to any authorized or previously proposed co-channel or adjacent-channel station entitled to interference protection under the Commission's rules or if an applicant demonstrates that:

- (1) A station, that must be protected from interference, potentially could suffer interference that would be eliminated by increasing the power of the interfered-with station; and
- (2) The interfered-with station may increase its own power consistent with the rules and without causing interference to any MDS booster station or response station hub which operates as part of the same coordinated system as the interfered-with station; and
- (3) The applicant requesting authorization of a power increase agrees to pay all expenses associated with the increase in power to the interfered-with station.
- 14. In Section 21.905, paragraph (b) would be revised to read as follows:

§21.905 Emissions and bandwidth.

(b) For purposes other than standard television transmission, different types of emissions may be authorized if the applicant describes fully the modulation and bandwidth desired, and demonstrates that the bandwidth desired is no wider than needed to provide the intended service. The licensee may subchannelize its authorized bandwidth, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel, and may utilize all or a portion of its authorized bandwidth for MDS response stations authorized pursuant to §21.909. The licensee may also, jointly with affected adjacent channel licensees, transmit utilizing bandwidth in excess of its authorized frequencies, provided that digital modulation is employed, all power spectral density requirements set forth in this Part are met and the out-of-band emissions restrictions set forth in §21.908 are met at the edges of the channels employed.

15. In Section 21.906, paragraphs (a) and (d) would be revised to read as follows:

#### §21.906 Antennas.

(a) Transmitting antennas shall be omnidirectional, except that a directional antenna with a main beam sufficiently broad to provide adequate service may be used either to avoid possible interference with other users in the frequency band, or to provide coverage more consistent with distribution of potential receiving points. In lieu of an omnidirectional antenna, a station may employ an array of directional antennas in order to reuse spectrum efficiently. When an applicant proposes to employ a directional antenna, or a licensee notifies the Commission pursuant to §21.42 of the installation of a sectorized antenna system, the applicant shall provide the

Commission with information regarding the orientation of the directional antenna(s), expressed in degree of azimuth, with respect to true north, and the make and model of such antenna(s).

- (d) Directive receiving antennas shall be used at all points other than response station hubs and shall be elevated no higher than necessary to assure adequate service. Receiving antenna height shall not exceed the height criteria of Part 17 of this chapter, unless authorization for use of a specific maximum antenna height (above ground and above mean sea level) for each location has been obtained from the Commission prior to the erection of the antenna. Requests for such authorization shall show the inclusive dates of the proposed operation. (See Part 17 of this chapter concerning the construction, marking and lighting of antenna structures.)
- 16. Section 21.907 would be deleted in its entirety.
- 17. In Section 21.908, the title would be revised, current paragraphs (a), (d) and (e) would be deleted, current paragraph (b) would be redesignated as paragraph (a), new paragraph (b) would be added and paragraph (c) would be revised to read as follows:

## §21.908 Transmitting equipment.

(a) On or after November 1, 1991, the maximum out-of-band power of a transmitter or of a booster transmitting on a single channel with an effective isotropic radiated power in excess of -9 dBW employing analog modulation shall be attenuated 38 dB relative to the peak visual carrier at the channel edges and constant slope attenuation from this level to 60 dB relative to the peak visual carrier at 1 MHz below the lower band edge and 0.5 MHz above the upper band edge. All out-of-band emissions extending beyond these frequencies shall be attenuated at least 60 dB below the peak visual carrier power. The maximum out-of-band power of a transmitter or of a booster transmitting on a single channel or a portion thereof with an effective isotropic radiated power in excess of -9 dBW employing digital modulation shall be 38 dB attenuation relative to the licensed average power level (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to- subchannel bandwidths) at the licensed channel edges, constant slope attenuation from that level to 60 dB attenuation at 3 MHz above the upper and below the lower licensed channel edges, and 60 dB attenuation below the licensed average power level (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) at all other frequencies. Notwithstanding the foregoing, in situations where a booster station transmits, or where adjacent channel licensees jointly transmit, a single signal over more than one channel utilizing digital modulation, the maximum out-of-band power shall be 38 dB attenuation relative to the licensed average power level of each channel at the channel edges of those combined channels, constant slope attenuation from that level to 60 dB attenuation at 3 MHz above the upper and below the lower edges of those combined channels, and 60 dB attenuation below the licensed average power level of each channel at all other frequencies. However, should harmful interference occur as a result of emissions outside the assigned channel, additional attenuation may be required. A transmitter licensed prior to

November 1, 1991, that remains at the station site initially licensed, and does not comply with this subsection, may continue to be used for its life if it does not cause harmful interference to the operation of any other licensee. Any non-conforming transmitter replaced after November 1, 1991, must be replaced by a transmitter meeting the requirements of this subsection.

- (b) The maximum out-of-band power of a booster transmitting on multiple channels carrying separate signals (a "broadband" booster) with an effective isotropic radiated power in excess of -9 dBW, employing either analog or digital modulation, shall be attenuated 38 dB relative to the peak visual carrier at the channel edges of channels occupied by analog signals and relative to the licensed average power level at the edges of channels occupied by digital signals. Within unoccupied channels within the overall passband of the booster, the maximum out-of-band power shall be attenuated 50 dB at 3 MHz above the upper and below the lower edges of occupied channels. For boosters operating in the frequency range 2.150-2.160/2 GHz, the maximum out-of-band power shall be attenuated 60 dB at 3 MHz and beyond above the upper and below the lower of these frequencies. For boosters operating in the range 2.500-2.690 GHz, the maximum out-of-band power shall be attenuated 50 dB at 3 MHz above the upper and below the lower of these frequencies, constant slope attenuation to 60 dB at 20 MHz above the upper and below the lower of these frequencies, and 60 dB attenuation at all frequencies beyond. Boosters operating with an effective isotropic radiated power less than -9 dBW shall have no particular out-of-band power attenuation requirement, except that if they cause harmful interference, their operation shall be terminated within 2 hours of notification by the Commission until the interference can be cured.
- (c) The maximum out-of-band power of a response station using all or part of a 6 MHZ channel and employing digital modulation shall be 38 dB attenuation relative to the rated power level at the 6 MHZ channel edges, constant slope attenuation from that level to 60 dB attenuation at 3 MHZ above the upper and below the lower channel edge, and 60 dB attenuation below the rated power level at all other frequencies. Notwithstanding the foregoing, in situations where response stations transmit over more than one 6 MHZ channel utilizing digital modulation, the maximum out-of-band power shall be 38 dB attenuation relative to the rated power level within each channel at the channel edges of those combined channels, constant slope attenuation from that level to 60 dB attenuation at 3 MHZ above the upper and below the lower edges of those combined channels, and 60 dB attenuation below the rated power level of each channel at all other frequencies. Notwithstanding either of the two foregoing sentences, the out-of-band power for discrete spurious signals above the upper and below the lower channel edge shall not be less than 40 dB attenuation, provided that such signals occur no more frequently than once in any 10 MHZ within 50 MHZ of a channel edge and none occur more than 50 MHZ from a channel edge). Notwithstanding any provision hereof, should harmful interference occur as a result of emissions outside the assigned channel, additional attenuation may be required.
- 18. In Section 21.909, paragraphs (a), (b) and (c) would be revised and new paragraphs (d), (e), (f), (g), (h), (i), (j), (k), (l) and (m) would be added to read as follows:

§21.909 MDS response stations.

- (a) An MDS response station is authorized to provide communication by voice, video and/or data signals with its associated MDS response station hub. An MDS response station may be operated only by the licensee of the MDS response station hub, by any lessee of the MDS response station hub, or by a subscriber of either. More than one response station may be operated at the same or different receiving locations. When a 125 kHz channel is employed for communications to a response station hub, the specific frequency channel which may be used by the response station is determined by the channel assigned to the licensee of the MDS station, in accordance with §74.939(i). The specified frequency channel may be subdivided to provide a distinct operating frequency for each of more than one response station. An MDS response station may also transmit utilizing bandwidth in excess of that authorized to the licensee jointly with affected adjacent channel licensees, provided that digital modulation is employed, all power spectral density requirements set forth in this Part are met and the out-of-band emissions restrictions set forth in §21.908(b) are met at the edges of the channels employed.
- (b) MDS response stations that utilize the bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz and 2674-2680 MHz or the 125 kHz channels may be installed and operated without an individual license to communicate with a response station hub authorized under a response station hub authorization, provided that the conditions set forth in §21.909(f) are complied with and that MDS response stations operating in the bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz and 2674-2680 MHz employ only digital modulation.
- (c) An application for a response station hub authorization shall be filed on FCC Form 304 and shall in addition to the requirements of that form, include the following:
- (1) The geographic coordinates, street address, and the height of the center line of the reception antenna(s) above mean sea level for the proposed response station hub; and

# (2) A specification of:

- (i) the response service area in which the applicant or its lessee proposes to install MDS response stations to communicate with the response station hub, any regions into which the response service area will be subdivided for purposes of interference analysis, and any regional classes of response station characteristics which will be used to define the operating parameters of groups of response stations within each region for purposes of interference analysis, including:
- (A) the maximum height above ground level of the transmission antenna that will be employed by any response station in the regional class and that will be used in interference analyses without the receipt of additional, site-specific authorization; and
- (B) the maximum equivalent isotropic radiated power (EIRP) that will be employed by any response station in the regional class and that will be used in interference analyses; and

- (C) any sectorization that will be employed, including the polarization to be employed by response stations in each sector and the geographic orientation of the sector boundaries, and that will be used in interference analyses; and
- (D) the combined worst-case outer envelope plot of the patterns of all models of response station transmission antennas that will be employed by any response station in the regional class to be used in interference analyses; and
- (E) the maximum number of response stations that will be operated simultaneously in each region using the characteristics of each regional class applicable to each region.
- (ii) the channel plan (including any guardbands at the edges of the channel) to be used by MDS response stations in communicating with each response station hub, including a statement as to whether the applicant will employ the same frequencies on which response stations will transmit to also transmit on a point-to-multipoint basis from an MDS station or MDS booster station; and
- (iii) the minimum received signal level that the proposed response station hub can actually utilize in the provision of service, specified in dBW/m<sup>2</sup>/Hz; and

## (3) A demonstration that:

- (i) The proposed response station hub is within a protected service area to which the applicant is entitled either (i) by virtue of its being the licensee of an incumbent MDS station whose channels are being converted for MDS response station use, or (ii) by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization. In the case of an application for response stations to utilize one or more of the 125 kHz response channels, such demonstration shall establish that the response service area is within the protected service area of the station authorized to utilize the associated channel E1, E2, F1 or F2; and
- (ii) The entire proposed response service area is within a protected service area to which the applicant is entitled either (i) by virtue of its being the licensee of an incumbent MDS station whose channels are being converted for MDS response station use, or (ii) by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization. In the alternative, the applicant may demonstrate that the licensee entitled to any protected service area which is overlapped by the proposed response service area has consented to such overlap. In the case of an application for response stations to utilize one or more of the 125 kHz response channels, such demonstration shall establish that the response service area is entirely within the protected service area of the station authorized to utilize the associated channel E1, E2, F1 or F2, or, in the alternative, that the licensee entitled to any cochannel protected service area which is overlapped by the proposed response service area has consented to such overlap; and

- (iii) The combined signals of all MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs will not generate a power flux density in excess of -73 dBW/m² (or the pro rata power spectral density equivalent based on the bandwidth actually employed in those cases where less than a 6 MHz channel is to be employed (e.g., -89.8 dBW/m² for 125 kHz channels or subchannels)) outside the boundaries of the applicant s protected service area, except to the extent that consents have been granted pursuant to §21.909(b)(3)(B) to an extension of the response service area beyond the boundaries of the protected service area; and
- (iv) The combined signals of all MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs will result in a desired to undesired signal ratio of at least 45 dB (or the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) (i) within the protected service area of any authorized or previously proposed cochannel incumbent MDS or ITFS station with a 56.33 km (35 miles) protected service area with center coordinates located within 160.94 km (100 miles) of the proposed response station hub, (ii) within the booster service area of any cochannel booster station entitled to such protection pursuant to §§21.913(f) or 74.985(f) and located within 160.94 km (100 miles) of the proposed response station hub, or (iii) at any cochannel response station hub entitled to such protection pursuant to §§21.909(h) or 74.939(g) and located within 160.94 km (100 miles) of the proposed response station hub, or, in the alternative, that the licensee of or applicant for such cochannel station or hub consents to the application; and
- (v) The combined signals of all MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs will result in a desired to undesired signal ratio of at least 0 dB (or the appropriately adjusted value based upon the ratio of the channel to subchannel bandwidths) (i) within the protected service area of any authorized or previously proposed adjacent channel incumbent MDS or ITFS station with a 56.33 km (35 miles) protected service area with center coordinates located within 160.94 km (100 miles) of the proposed response station hub, (ii) within the booster service area of any adjacent channel booster station entitled to such protection pursuant to §§21.913(f) or 74.985(f) and located within 160.94 km (100 miles) of the proposed response station hub, or (iii) at any adjacent channel response station hub entitled to such protection pursuant to §§21.909(h) or 74.939(g) and located within 160.94 km (100 miles) of the proposed response station hub, or, in the alternative, that the licensee of or applicant for such adjacent channel station or hub consents to the application; and
- (vi) The combined signals of all MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs will result in a desired to undesired signal ratio of at least 45 dB (or the appropriately adjusted value based upon the ratio of the channel to subchannel bandwidths) at any registered receive site of any authorized or previously-proposed cochannel ITFS station or booster station, or at any ITFS response station hub, located within 80 km (50 miles) of the proposed response station hub, or, in the alternative, that the licensee of or applicant for such cochannel station or hub consents to the application; and

- (vii) The combined signals of all MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs will result in a desired to undesired signal ratio of at least 0 dB (or the appropriately adjusted value based upon the ratio of the channel to subchannel bandwidths) at any registered receive site of any authorized or previously-proposed adjacent channel ITFS station or booster station, or at any ITFS response station hub, located within 80 km (50 miles) of the proposed response station hub, or, in the alternative, that the licensee of or applicant for such adjacent channel station or hub consents to the application; and
- (viii) The proposed response station hub can receive transmissions from the response service area without interference.
  - (4) A certification that the application has been served upon
- (i) the licensee of any station (including any booster station or response station hub) with a protected service area which is overlapped by the proposed response service area;
- (ii) the holder of any authorization (including any booster station or response station hub authorization) with a protected service area that adjoins the applicant s protected service area;
- (iii) every licensee of or applicant for (a) any authorized or previously proposed incumbent MDS or ITFS station with a 56.33 km (35 miles) protected service area with center coordinates located within 160.94 km (100 miles) of the proposed response station hub, or (b) any associated booster station or response station hub authorized to the holder of a license for a facility described in (a); and
- (iv) every licensee of or applicant for any authorized or previously proposed ITFS station (including any booster station or response station hub) located within 80 km (50 miles) of the proposed response station hub.
- (d) Notwithstanding the provisions of §21.901(d)(4) and except as set forth in §21.27(d), applications for response station hub authorizations may be filed at any time. Notwithstanding any other provision of Part 21 (including §21.31), applications for response station hub authorizations meeting the requirements of §21.909(c) shall cut-off applications that are filed on a subsequent day for facilities that would cause harmful electromagnetic interference to the proposed response station hubs. A response station hub shall not be entitled to protection from interference caused by facilities proposed on or prior to the day the application for the response station hub authorization is filed. Response stations shall not be required to protect from interference facilities proposed on or after the day the application for the response station hub authorization is filed.
- (e) Notwithstanding the provisions of §21.30(b)(4) and except as set forth in §21.27(d), any petition to deny an application for a response station hub authorization shall be filed no later than

the sixtieth (60th) day after the date of public notice announcing the filing of such application or major amendment thereto.

- (f) An MDS response station hub authorization shall be conditioned upon compliance with the following:
- (1) No MDS response station shall be located beyond the response service area of the response station hub with which it communicates; and
- (2) No MDS response station shall operate with an EIRP in excess of that specified in the application for the response station hub pursuant to §21.909(c)(2)(i)(B) for the particular regional class of characteristics with which the response station is associated, and such response station shall not operate at an excess of 18 dBW EIRP without a demonstration that no interference shall occur from that facility operating at a higher power level; and
- (3) Each MDS response station shall employ a transmission antenna oriented towards the response station hub with which the MDS response station communicates, and such antenna shall be no less directional than the worst case outer envelope pattern specified in the application for the response station hub pursuant to §21.909(c)(2)(i)(D) for the regional class of characteristics with which the response station is associated; and
- (4) The combined out-of-band emissions of all response stations using all or part of a 6 MHz channel and employing digital modulation shall comply with §21.908(b). The combined out-of-band emissions of all response stations using a 125 kHz channel shall comply with §21.909(j). However, should harmful interference occur as a result of emissions outside the assigned channel, additional attenuation may be required; and
- (5) The response stations transmitting simultaneously at any time within any given region of the response service area utilized for purposes of analyzing the potential for interference by response stations shall conform to the numerical limits for each class of response station proposed in the application for the response station hub authorization. Notwithstanding the foregoing, the licensee of a response station hub authorization may alter the number of response stations of any class operated simultaneously in a given region without prior Commission authorization, provided that the licensee first notifies the Commission of the altered number of response stations of such class(es) to be operated simultaneously in such region, provides the Commission with an analysis establishing that such alteration will not result in any increase in electrical interference to any existing or proposed MDS or ITFS station, booster station or response station hub or to any MDS Basic Trading Area or Partitioned Service Area authorization holder entitled to protection pursuant to §21.909(c)(3), or that the applicant or licensee of such facility has consented to such interference, and serves a copy of such notification and analysis upon each party entitled to be served pursuant to §21.909(c)(4); and
- (6) The height employed at any location shall not exceed the criteria set forth in §17.7 of this chapter.

- (g) The response channels associated with Channels E3, E4, F3, F4, H1, H2 and H3 are allocated to the private operational-fixed service (Part 101).
- Commencing upon the filing of an application for an MDS response station hub authorization and until such time as the application is dismissed or denied or, if the application is granted, a certificate of completion of construction is filed, the incumbent MDS station whose channels are being utilized shall be entitled both to interference protection pursuant to  $\S\S21.902(b)(3)$  and (4) and 21.938(b)(2) and to protection of the response station hub pursuant to the following provisions of this subsection. Upon the filing of a certificate of completion of construction for an MDS response station hub where the channels of an incumbent MDS station are being utilized, unless the application for the response station hub authorization specifies that the same frequencies will be employed for point-to-multipoint transmissions by MDS stations and/or MDS booster stations, the incumbent MDS station whose channels are being utilized shall no longer be entitled to interference protection pursuant to §§21.902(b)(3) and (4) and 21.938(b)(2) within the response service area with regard to any portion of any 6 MHz channel employed solely for response station communications. In such situations, in lieu of the requirements set forth in §§21.902, 21.938(b)(2) and 74.903, an applicant for any new or modified MDS or ITFS station (including any response station or booster station) shall be required to demonstrate that the predicted desired to undesired signal ratio at each response station hub to which the proposed new or modified MDS or ITFS station has an unobstructed signal path will be at least 45 dB cochannel or 0 dB adjacent channel (or the appropriately adjusted values based upon the ratios of the channel-to-subchannel bandwidths) as a result of the new or modified MDS or ITFS station. In making such demonstration, the applicant shall assume installation of an omnidirectional unity gain plane-polarized receive antenna mounted with its centerline as specified in the application for the response station hub in lieu of the reference antenna specified in §§21.902 and 74.903. Upon the certification of completion of construction of an MDS response station hub where the channels of an incumbent MDS station are being utilized and the application for the response station hub authorization specifies that the same frequencies will be employed for point-to-multipoint transmissions, the incumbent MDS station whose channels are being utilized shall be entitled both to interference protection pursuant to §§21.902(b)(3) and (4) and 21.938(b)(2) and to protection of the response station hub pursuant to the preceding provisions of this subsection.
- (i) For purposes of §21.11, §21.38, §21.39, §§21.43 21.45, and §21.303 of this Part, an MDS response station hub authorization shall be deemed a license and subject to the requirements of those sections as if such authorization were a license.
- (j) 125 kHz wide response channels shall be subject to the following requirements: The 125 kHz wide channel shall be centered at the assigned frequency. If amplitude modulation is used, the carrier shall not be modulated in excess of 100%. If frequency modulation is used, the deviation shall not exceed  $\pm$  25 kHz. Any emissions outside the channel shall be attenuated at the channel edges at least 35 dB below peak output power when analog modulation is employed or 35 dB below average output power when digital modulation is employed (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel

bandwidths). Any emissions more than 125 kHz from either channel edge, including harmonics, shall be attenuated at least 60 dB below peak output power when analog modulation is employed or 60 dB below average output power when digital modulation is employed (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths). Notwithstanding the foregoing, in situations where adiacent channel licensees jointly transmit over more than one channel utilizing digital modulation, the maximum out-of-band power shall be 35 dB attenuation relative to the licensed average power level of each channel at the channel edges of those combined channels. Emissions more than 125 kHz from either edge of the combined channels, including harmonics, shall be attenuated at least 60 dB below peak analog power or average digital power of each channel, as appropriate. Notwithstanding the foregoing, the out-of-band power for discrete spurious signals above the upper and below the lower channel edge shall not be less than 40 dB attenuation, provided that such signals occur no more frequently than once in any 10 MHz within 50 MHz of a channel edge and none occur more than 50 MHz from a channel edge). Different types of emissions may be authorized for use on 125 kHz wide channels if the applicant describes fully the modulation and bandwidth desired, and demonstrates that the modulation selected will cause no more interference than is permitted under this subsection. Greater attenuation may be required if interference is caused by out-of-channel emissions.

- (k) The transmitter of a response station may be operated unattended. The overall performance of the response station transmitter shall be checked as often as necessary to ensure that it is functioning in accordance with the requirements of the Commission's rules. The licensee of a response station hub is responsible for the proper operation of associated response station transmitters at all times. The transmitters shall be installed and protected in such manner as to prevent tampering or operation by unauthorized persons.
- (l) The transmitting apparatus employed at MDS response stations shall have received type acceptance.
- (m) An MDS response station shall be operated only when engaged in communication with its associated MDS response station hub or MDS station, or for necessary equipment or system tests and adjustments. Radiation of an unmodulated carrier and other unnecessary transmissions are forbidden.
- Note 1: Calculations required under this rule shall be performed in accordance with Method For Predicting Accumulated Signal Power From a Multiplicity of Statistically-located Transmitters as published as Appendix \_\_ to the [cite to the Report and Order adopting proposed rules].
- 18. Section 21.913 would be revised in its entirety to read as follows:

#### §21.913 Signal booster stations.

(a) Authorizations for Multipoint Distribution Service (MDS) booster stations may be granted to an MDS conditional licensee or licensee, or to a third party with a fully-executed lease or

consent agreement with an MDS conditional licensee or licensee. An MDS booster station may reuse channels to repeat the signals of MDS stations or for the origination of signals on MDS channels. An MDS booster station authorized pursuant to subsection (b) may only be licensed to an MDS licensee or conditional licensee, and may operate only on one or more MDS channels that are licensed to the licensee of the MDS booster station. An MDS booster station authorized pursuant to subsection (e) may be licensed to an MDS licensee or conditional licensee or to a third party with a fully-executed lease or consent agreement with an MDS conditional licensee or licensee, and may operate only on one or more MDS channels that are licensed to or leased by the licensee of the MDS booster station. No booster station may be authorized for the reuse of channels authorized to an MDS station without the written consent of the licensee of the station whose channels are reused, and such consent must be included with the booster station application. The aggregate power flux density generated by an MDS station and all associated signal booster stations may not exceed -73 dBW/m<sup>2</sup> (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) at or beyond the boundaries of the protected service area of any MDS station whose channel is being reused, as measured at locations for which there is an unobstructed signal path, unless the consent of the adjoining cochannel protected service area licensee is obtained.

- (b) Any eligible party under §21.913(a) may secure an authorization for an MDS signal booster that has a maximum power level in excess of -9 dBW EIRP (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) by submitting an application on FCC Form 304 and including, in addition to the requirements of that form:
- (1) A demonstration that the proposed booster station site is within the protected service area, as defined in §§21.902(d), 21.933 and 74.903(d), of every incumbent MDS or ITFS stations whose channels are to be reused; and
- (2) A study which demonstrates that the aggregate power flux density of the MDS station and all associated booster stations at or beyond the boundary of the protected service areas of the MDS station whose channels are to be reused does not exceed -73.0 dBW/m² (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) at locations for which there is an unobstructed signal path unless the consent of the adjoining protected service area licensee has been obtained; and
- (3) In lieu of the requirements of §§21.902(c) and (i), a study which demonstrates that the proposed booster station will cause no harmful interference to co-channel and adjacent-channel existing or previously-proposed ITFS and MDS stations with protected service area center coordinates as specified in §21.902(d) or, in the case of ITFS stations without protected service areas, transmitters, within 160.9 kilometers (100 miles) of the proposed booster station's transmitter site, or any ITFS or MDS response station hubs or booster stations within 160.94 kilometers (100 miles) of the proposed booster station s transmitter site. In the alternative, a statement from the MDS or ITFS permittee, licensee or conditional licensee stating that it does not object to operation of the MDS signal booster station may be submitted; and

- (4) A written consent statement of the licensee of each MDS and ITFS station whose channel is reused; and
- (5) A specification of the area to be served by the booster (the booster service area), which may not overlap the booster service area of any other booster authorized to or proposed by the applicant; and

## (6) A demonstration either

- (i) that the booster service area is entirely within the protected service area to which each licensee of a station whose channels are being reused is entitled either
- (A) by virtue of its being the licensee of an incumbent MDS station whose channels are being converted for MDS response station use, or
- (B) by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization; or
- (ii) that the licensee entitled to any protected service area which is overlapped by the proposed booster service area has consented to such overlap; and
- (7) A demonstration that the proposed booster service area can be served by the proposed booster without interference; and
- (8) A certification that copies of the materials set forth in this §21.913(b) have been served upon the licensee, conditional licensee or permittee of each station (including each response station hub and booster station) required to be studied pursuant to §21.913(b)(3) and the holder of any Basic Trading Area or Partitioned Service Area authorization adjoining the proposed booster service area.
- (c) Notwithstanding the provisions of §21.901(d)(4) and except as provided in §21.27(d), applications for booster station authorizations may be filed at any time. Notwithstanding any other provision of Part 21 (including §21.31), applications for booster authorizations meeting the requirements of §21.913(b) shall cut-off applications that are filed on a subsequent day for facilities that would cause harmful electromagnetic interference to the proposed booster stations. A booster station shall not be entitled to protection from interference caused by facilities proposed on or prior to the day the application for the booster station authorization is filed. Booster stations shall not be required to protect from interference facilities proposed on or after the day the application for the booster station authorization is filed.
- (d) Notwithstanding the provisions of §21.30(b)(4), any petition to deny an application for a booster station authorization shall be filed no later than the sixtieth (60th) day after the date of public notice announcing the filing of such application or major amendment thereto.

- (e) An eligible party pursuant to §21.913(a) may install and commence operation of a signal booster station that has a maximum power level of -9 dBW EIRP (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths), subject to the condition that for sixty (60) days after installation, no objection or petition to deny is filed by an authorized co-channel or adjacent-channel ITFS or MDS station with a transmitter within 8.0 kilometers (5 miles) of the coordinates of the signal booster. An eligible party pursuant to §21.913(a) seeking to install a signal booster under this rule must, within 48 hours after installation, submit
- (1) a description of the signal booster technical specifications (including an antenna envelope plot or, if the envelope plot is on file with the Commission, the make and model of the antenna, antenna gain and azimuth), the coordinates of the booster, the height of the center of radiation above mean sea level, the street address of the signal booster and a description of the area to be served by the signal booster (the booster service area),
- (2) a demonstration that the booster service area is entirely within the protected service area to which each licensee of a station whose channels are being reused is entitled either
- (i) by virtue of its being the licensee of an incumbent MDS station whose channels are being converted for MDS response station use, or
- (ii) by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization, or, in the alternative, that the licensee entitled to any protected service area which is overlapped by the proposed booster service area has consented to such overlap; and a demonstration that the proposed booster service area can be served by the proposed booster without interference;
- (3) either a certification that no Federal Aviation Administration determination of No Hazard to Air Navigation is required under Part 17 of this chapter or, if such determination is required, either:
  - (i) a statement of the FCC Antenna Structure Registration Number; or
- (ii) if an FCC Antenna Structure Registration Number has not been assigned for the antenna structure, the filer must indicate the date the application by the antenna structure owner to registered the antenna structure was filed with the FCC in accordance with Part 17 of this chapter. and

#### (4) a certification that:

(i) The maximum power level of the signal booster transmitter does not exceed -9 dBW EIRP (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths); and

- (ii) No registered receiver of an ITFS E or F channel station, constructed prior to May 26, 1983, is located within a 1.61 km (1 mile) radius of the coordinates of the booster, or in the alternative, that a consent statement has been obtained from the affected ITFS licensee; and
- (iii) No environmental assessment location as defined at §1.1307 of this chapter is affected by installation and/or operation of the signal booster; and
- (iv) Each MDS and/or ITFS station licensee (including the licensees of booster stations and response station hubs) with protected service areas or registered receivers within a 8.0 km (5 mile) radius of the coordinates of the booster has been given notice of its installation; and
- (v) Consent has been obtained from each MDS station licensee whose signal is reused by the signal booster; and
- (vi) The signal booster site is within the protected service area of the MDS stations whose channels are to be reused, and
- (vii) The aggregate power flux density of the MDS stations to be reused and their associated booster stations at or beyond the boundary of the protected service areas of the MDS stations to be reused does not exceed -73.0 dBW/m² (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) at locations for which there is an unobstructed signal path; and,
- (viii) The MDS booster station filer understands and agrees that in the event harmful interference is claimed by the filing of an objection or petition to deny, the licensee must terminate operation within two (2) hours of written notification by the Commission, and must not recommence operation until receipt of written authorization to do so by the Commission.
- (f) An applicant for any new or modified MDS or ITFS station (including a response station hub authorization or a booster station) shall demonstrate compliance with the desired to undesired signal ratio protected service area protection requirements set forth in §§21.902, 21.938 and 74.903 with respect to the portion of any previously proposed or authorized booster service area that is within the protected service area of a primary incumbent MDS station by using the transmission parameters of the MDS booster station (including EIRP, polarization(s) and antenna height) with respect to those channels authorized to an incumbent MDS station that are being reused. Upon the filing of a certification of completion of construction for an MDS booster station applied for pursuant to §21.913(b) or upon the filing of an MDS booster station notification pursuant to §21.913(e), each incumbent MDS station whose channels are being reused by the MDS signal booster shall no longer be entitled to interference protection pursuant to §\$21.902(b)(3) and (4), 21.938(b)(2) and (3) and 74.903 within the booster service area based on the transmission parameters of the incumbent MDS station whose channels are being reused. A booster station shall not be entitled to protection from interference caused by facilities proposed

on or prior to the day the application or notification for the booster station is filed. Booster stations shall not be required to protect from interference facilities proposed on or after the day the application or notification for the booster station is filed.

20. In Section 21.925, paragraph (b) would be revised to read as follows:

§21.925 Applications for BTA authorizations and MDS station licenses.

- (b) Separate long-form applications must be filed for each individual MDS station license sought within the protected service area of a BTA or PSA, including:
- (1) an application for each E-channel group, F-channel group, and single H, 1, and 2A channel station license sought;
  - (2) an application for each MDS response station hub authorization sought;
- (3) an application for each MDS booster station that will operate with an EIRP in excess of -9 dBW (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths); and
- (4) an application for authority to operate at an MDS station in the area vacated by an MDS station incumbent that has forfeited its station license; and
- (5) an application for each ITFS-channel group station license sought in accordance with §§74.990 and 74.991.
- 21. In Section 21.938, paragraph (b) would be revised to read as follows:

§21.938 BTA and PSA technical and interference provisions.

- (b) Unless the affected parties have executed a written interference agreement in accordance with §21.937, and subject to the provisions of §§21.909, 21.913, 74.939 and 74.985 regarding the protection of response station hubs and booster stations from harmful electromagnetic interference, stations licensed to a BTA or PSA authorization holder must not cause harmful electromagnetic interference to the following:
  - (1) the protected service area of other authorization holders in adjoining BTAs or PSAs.

- (2) the 56.33 km (35 mile) protected service areas of authorized or previously proposed MDS stations (incumbents).
- (3) registered receive sites and protected service areas of authorized or previously proposed stations in the Instructional Television Fixed Service pursuant to the manner in which interference is defined in §74.903(a).

# PART 74 - EXPERIMENTAL, AUXILIARY, AND SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTION SERVICES

22. The authority citation for Part 74 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334.

23. Section 74.901 would be revised by amending the definition of an ITFS response station and by adding definitions for Response station hub and Signal booster station to read as follows:

## §74.901 Definitions.

ITFS response station. A fixed station operated by an ITFS licensee, the lessee of ITFS channel capacity or a subscriber of either to communicate with a response station hub or associated ITFS station. A response station under this part may share facilities with other ITFS response stations and/or one or more Multipoint Distribution Service (MDS) response stations authorized pursuant to §21.909.

Response Station Hub. A fixed facility licensed to an ITFS licensee and operated by an ITFS licensee or the lessee of an ITFS channel for the reception of information transmitted by one or more ITFS or MDS response stations. A response station licensed under this part may share facilities with other ITFS response station hubs and/or one or more MDS response station hubs authorized pursuant to §21.909.

\* \* \* \*

Signal Booster Station. An ITFS station licensed for use in accordance with §74.985 that operates on one or more ITFS channels. Signal booster stations are intended to augment service as part of a distributed transmission system where signal booster stations retransmit the signal of an ITFS station and/or originate information. A signal booster station licensed under this part

may share facilities with other ITFS signal booster stations and/or one or more MDS signal booster stations authorized pursuant to §21.913.

\* \* \* \* \*

24. In Section 74.902, paragraphs (c) and (d) would be amended to read as follows:

§74.902 Frequency assignments.

\* \* \* \* \*

- (c) Channels 2596-2602, 2602-2608, 2608-2614, 2614-2620, 2620-2626, 2626-2632, 2632-2638, and 2638-2644 MHz and the corresponding 125 kHz channels listed in §74.939(i) are shared with the Multipoint Distribution Service. No new Instructional Television Fixed Service applications for these channels filed after May 25, 1983 will be accepted. In those areas where Multipoint Distribution Service use of these channels is allowed pursuant to §21.902, Instructional Television Fixed Service users of these channels will continue to be afforded protection from harmful co-channel and adjacent channel interference from Multipoint Distribution Service stations.
- (d) (1) A licensee is limited to the assignment of no more than four 6 MHz and four 125 kHz channels for use in a single area of operation, all of which should be selected from the same Group listed in paragraph (a) of this section unless good cause to utilize channels from multiple Groups is shown. An area of operation is defined as the area 20 miles or less from the ITFS transmitter. Applicants shall not apply for more channels than they intend to construct within a reasonable time, simply for the purpose of reserving additional channels. The number of channels authorized to an applicant will be based on the demonstration of need for the number of channels requested. The Commission will take into consideration such factors as the amount of use of any currently assigned channels and the amount of proposed use of each channel requested, the amount of, and justification for, any repetition in the schedules, and the overall demand and availability of ITFS channels in the community. For those applicant organizations formed for the purpose of serving accredited institutional or governmental organizations, evaluation of the need will only consider service to those specified receive sites which submitted supporting documentation pursuant to §74.932(a)(4).
- (2) An applicant leasing excess capacity and proposing a schedule which complies in all respects with the requirements of §74.931(e) will have presumptively demonstrated need, in accordance with paragraph (d)(1) of this section, for no more than four channels. This presumption is rebuttable by demonstrating that the application does not propose to comport with our educational programming requirements, that is, to transmit some formal educational programming, as defined in §74.931(a), and to transmit the requisite minimum programming of §74.931(e) for genuinely educational purposes and to receive sites when students are there.

\* \* \* \* \*

25. In Section 74.903, paragraph (a)(3) would be amended and paragraph (b)(6) would be added to read as follows:

#### §74.903 Interference.

(a) \* \*

(3) For purposes of this section and except as set forth in §74.939 regarding the protection of response station hubs, all interference calculations involving receive antenna performance shall use the reference antenna characteristics shown in Figure 1, §74.937(a) or, in the alternative, utilize the actual pattern characteristics of the antenna in use at the receive site under study. If the actual receive antenna pattern is utilized, the applicant must submit complete details including manufacturer, model number(s), co-polar and cross-polar gain patterns, and other pertinent data.

\* \* \* \* \*

(b) \* \* \*

(6) Special rules relating to response service areas and booster service areas are set forth in §§21.909, 21.913, 74.939 and 74.985. To the extent those special rules are inconsistent with any rules set forth above, those special rules shall control.

\* \* \* \* \*

26. In Section 74.911, paragraph (a)(1) would be amended and a new paragraph (e) would be added to read as follows:

## §74.911 Processing of ITFS station applications.

(a) \* \* \*

(1) In the first group are applications for new stations or major changes in the facilities of authorized stations. These applications are subject to the provisions of paragraph (c) of this section. A major change for an ITFS station will be any proposal to add new channels, change from one channel (or channel group) to another, change polarization, increase the EIRP in any direction by more than 1.5 dB, increase the transmitting antenna height by 25 feet or more, or relocate a facility's transmitter site by 10 miles or more. Applications submitted pursuant to §§74.939 and 74.985 shall not be considered major change applications. However, the Commission may, within 15 days after the acceptance of an application, or 15 days after the acceptance of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change, and subject to the provisions of paragraph (c) of this section.

- (e) Notwithstanding any other provisions of this Part 74, effective as of [date of adoption of new rules], there shall be one one-week window at such time as the Commission shall announce by public notice for the filing of applications for booster stations and response station hub authorizations, during which all applications shall be deemed to have been filed as of the same day for purposes of §§74.939 and 74.985. Following the publication of a public notice announcing the tendering for filing of applications submitted during that window, applicants shall have a period of sixty (60) days to amend their applications, provided such amendments do not result in any increase in interference to any previously proposed or authorized station (including facilities proposed during the window) absent consent of the applicant for or licensee of the station that would receive such additional interference. At the conclusion of that sixty (60) day period, the Commission shall publish a public notice announcing the acceptance for filing of all applications submitted during the initial window, as amended during the sixty (60) day period. All petitions to deny such applications must be filed within sixty (60) days of such second public notice.
- 27. In Section 74.912, paragraph (a) would be revised to read as follows:

### §74.912 Petitions to deny.

- (a) Any party in interest may file with the Commission a petition to deny any application for new facilities or major changes in the facilities of authorized stations, provided such petitions are filed by the date established pursuant to the cut-off provisions of §74.911(c). In the case of all other applications, except those excluded under Section 309(c) of the Communications Act of 1934, as amended, and except as provided in §§74.939 and 74.985, petitions to deny must be filed not later than 30 days after issuance of a public notice of the acceptance for filing of the applications. In the case of applications for renewal of license, petitions to deny may be filed after the issuance of a public notice of acceptance for filing of the applications and up until the first day of the last full calendar month of the expiring license term. Any party in interest may file with the Commission a petition to deny any notification regarding ITFS booster stations within the 60 day period provided for in §74.985(e).
- 28. In Section 74.931, paragraphs (a)(1), (b) and (e) would be revised to read as follows:

#### §74.931 Purpose and permissible service.

(a)(1) Instructional television fixed stations are intended primarily to provide a formal educational and cultural development in aural and visual form, to students enrolled in accredited public and private schools, colleges and universities. Authorized instructional television fixed station channels must be used to transmit formal educational programming offered for credit to enrolled students of accredited schools or for response channels employed in connection with formal